

2024 Peanut/Field Corn/Soybean Weed Control Recommendations

Eric P. Prostko – Professor/Extension Weed Specialist

Dept. Crop & Soil Sciences

Five Important General Weed Management Tips to Consider for All Crops:

- 1) Start clean using a combination of tillage (deep-turning), cover crops, and/or herbicides.
- 2) Use narrow rows (≤ 30 ") or twin rows when practical.
- 3) Use multiple residual herbicides in the system.
- 4) Make timely postemergence applications (tallest weeds ≤ 3 " tall, **not the average**).
- 5) Hand-remove weed escapes before seed is produced.

Table 1. Herbicide Programs for Peanut.

System	Tillage Method	Timing					
		Preplant Burndown ¹	Preplant Incorporated	Preemergence	Early-Postemergence (~10-20 DAP ²)	Postemergence (~30-45 DAP)	Late-Postemergence ⁶ (~60 DAP) (for the extended residual control of Palmer amaranth, tropical spiderwort, and annual grasses)
non-irrigated (dryland)	strip-till ³	Glyphosate or Paraquat + 2,4-D amine + Valor		No Rain in 7-10 DAP Paraquat + Prowl	Paraquat + either Storm or Basagran + either Dual Magnum or Warrant or Zidua or Anthem Flex or Outlook ⁶	ALS Resistance: Cobra or Ultra Blazer + (either Dual Magnum or Warrant or Zidua or Anthem Flex or Outlook ⁶) + 2,4-DB No ALS Resistance: Cadre ⁴ + (either Dual Magnum or Warrant or Zidua or Anthem Flex or Outlook ⁶) + 2,4-DB **A 4-way tank-mixture can be used if required (Cadre + Cobra or Ultra Blazer + 2,4-DB + either Dual Magnum or Warrant or Zidua or Outlook⁶)	Dual Magnum or Outlook PHI (days) Dual Magnum = 90 Outlook = 80 Max Total Rate/A/Season (oz) Dual Magnum = 44 Outlook = 21 *Use of other Group 15 herbicides is limited by peanut stage of growth and should not be applied late-postemergence: Anthem Flex = R3 (beginning pod) Warrant = R1 (beginning bloom) Zidua = R3 (beginning pod)
				Rain in 7-10 DAP Paraquat + Prowl + Valor + Strongarm ⁴ or Paraquat + Brake + Strongarm ⁴ or Paraquat + Valor + Brake ⁵			
	conventional	Prowl or Sonalan + Strongarm ⁴	No PRE if rain is not expected in 7-10 DAP Paraquat + either Storm or Basagran + either Dual Magnum or Warrant or Zidua or Anthem Flex or Outlook ⁶				
			Rain in 7-10 DAP Either Valor or Brake ⁵ or Valor + Brake ⁵				
irrigated	strip-till ³	Glyphosate or Paraquat + 2,4-D amine + Valor		Paraquat + Prowl + Valor + Strongarm ⁴ or Paraquat + Brake ⁵ + Strongarm ⁴ or Paraquat + Valor + Brake ⁵			
	conventional				Prowl or Sonalan + either Valor + Strongarm ⁴ or Brake ⁵ + Strongarm ⁴ or Valor + Brake ⁵		

¹Apply at least 7 days before planting. ²DAP = days after planting. ³Annual grass control in strip-tillage systems is often more difficult thus additional applications of a postemergence grass herbicide (i.e. Fusilade, Poast, and Select) will be needed. ⁴Before using Cadre and/or Strongarm, rotational crop restrictions must be considered. ⁵Do not apply Brake to the same field more than 2 years in a row. ⁶Dual Magnum/Warrant/Outlook are in the same herbicide family (chloroacetamide) and have the same mode of action (inhibit very long chain fatty acids). Zidua/Anthem Flex are not in the same herbicide family (isoxazoline) but have the same mode of action. Multiple applications (> 2) of these herbicides in a single year should be avoided when possible to prevent or delay the evolution of resistance. These residual herbicides have no postemergence activity.

Table 2. Herbicide Programs for Field Corn.

Corn Hybrid/System	Preemergence (All Systems)	Early-Postemergence ¹ (~17-30 DAP, V3-V5, ~279-411 GDD's ²)	Layby/ Directed/Hooded
Conventional	Atrazine ³ or Dual II Magnum or Warrant or Outlook	1) Prowl + Atrazine + Crop Oil or 2) Prowl + Atrazine + one of the following: Accent Q; Callisto; Capreno; Armezon/Impact/Impact Z; Laudis; Revulin Q; Shieldex; Steadfast Q	Evik or Paraquat
Liberty Link®		1) Liberty + Atrazine + one of the following: Acuron (48 oz/A); Anthem Maxx; Dual Magnum; Outlook; Prowl; Warrant; Zidua	
Roundup Ready®		1) Glyphosate + Atrazine + one of the following: Anthem Maxx; Dual Magnum; Outlook; Prowl; Zidua or 2) Glyphosate + Atrazine + one of the following: Callisto; Capreno; Armezon/Impact/Impact Z; Laudis; Revulin Q; Shieldex; Steadfast Q or 3) Glyphosate + Status or 4) Acuron GT or Halex GT + Atrazine or 5) Glyphosate + Acuron (48 oz/A)	

¹When using Counter (INFR) for soil insect and nematode control, the following herbicides should **NOT** be applied POST: Accent Q, Acuron GT, Acuron, Callisto, Capreno, Halex GT, Revulin Q, and Steadfast Q. ²GDD's = growing degree-days from planting (50°/86° F). ³A maximum of 2.0 to 2.5 lb ai/A of atrazine can be applied in a single year depending upon application methods.

Table 3. Herbicide Programs for Soybean.

Soybean System	Preemergence ¹	Postemergence (~20-30 DAP)
Roundup Ready® (glyphosate)	One of the following: Authority MTZ; Canopy/Cloak; TriCor/Metribuzin or	glyphosate + Reflex; or glyphosate + (Prefix or Warrant Ultra); or Flexstar GT
	One of the following: Boundary; Prowl; Anthem Maxx; Dual Magnum; Warrant; Zidua; Outlook; Tendovo; Treflan (PPI) or	glyphosate + Reflex; or Flexstar GT
	One of the following: Authority XL; Envive; Fierce; Fierce MTZ; Surveil; Trivence; Valor	glyphosate + (Dual Magnum or Warrant or Zidua or Anthem Maxx); or Sequence
Liberty Link® (glufosinate)	One of the following: a) Boundary or Tendovo or b) TriCor/Metribuzin + either Anthem Maxx, Dual Magnum, Outlook, Prowl, Warrant, or Zidua or	Liberty + Reflex
	a) Prowl + One of the following: Authority MTZ; Envive; Surveil; TriCor/Metribuzin; Trivence; Valor or b) Fierce or Fierce MTZ	Liberty + (Dual Magnum or Warrant or Zidua)
Xtend® (glyphosate, dicamba) ²	a) Prowl + One of the following: Authority MTZ; Canopy/Cloak; Envive; Surveil; Tricor/Metribuzin; Trivence; Valor or b) Boundary or Tendovo or c) Fierce or Fierce MTZ	a) labeled glyphosate + Xtendimax (VG) + (Dual Magnum or Warrant) or b) labeled glyphosate + Engenia + (Dual Magnum or Warrant or Zidua or Outlook) or c) labeled glyphosate + Tavium (VG) Use DRA, VRA/PHBA with dicamba as required.
XtendFlex® (glyphosate, glufosinate, dicamba)	a) Prowl + One of the following: Authority MTZ; Canopy/Cloak; Envive; Surveil; Tricor/Metribuzin; Trivence; Valor or b) Boundary or Tendovo or c) Fierce or Fierce MTZ	a) labeled glyphosate + Xtendimax (VG) + (Dual Magnum or Warrant) or b) labeled glyphosate + Engenia + (Dual Magnum or Warrant or Zidua or Outlook) or c) labeled glyphosate + Tavium (VG) or d) Liberty + Reflex or Dual Magnum or Warrant or Zidua (Avoid Reflex if Valor product was used PRE) **Liberty and dicamba should not be tank-mixed. Use DRA, VRA/PHBA with dicamba as required.
Enlist E3™ (2,4-D choline, glyphosate, glufosinate)	a) Prowl + One of the following: Authority MTZ; Canopy/Cloak; Envive; Surveil; Tricor/Metribuzin; Trivence; Valor or b) Boundary or Tendovo c) Fierce or Fierce MTZ	a) Enlist One + Liberty + (Dual Magnum or Warrant or Anthem Maxx or Zidua) or b) Enlist Duo + (Anthem Maxx or Warrant or Zidua)
Conventional	a) Anthem Maxx or Dual Magnum or Outlook or Prowl or Warrant or Zidua + One of the following: Authority MTZ; Canopy/Cloak; TriCor/Metribuzin or b) Boundary or Tendovo	Reflex; or Prefix; or Warrant Ultra (tank-mix with Classic or FirstRate if annual MG and/or sicklepod are problems unless Tendovo was used PRE)

¹Before using any metribuzin product in soybeans (Authority MTZ, Boundary, Canopy/Cloak, Fierce MTZ, Tendovo, TriCor, Trivence), check variety tolerance, soil pH, organic matter, and soil texture. ²Xtend® soybeans are NOT tolerant of glufosinate (Liberty). Authority (sulfentrazone) products have an 18-month cotton rotation restriction. Tables updated: February 22, 2024 (replaces all previous versions).